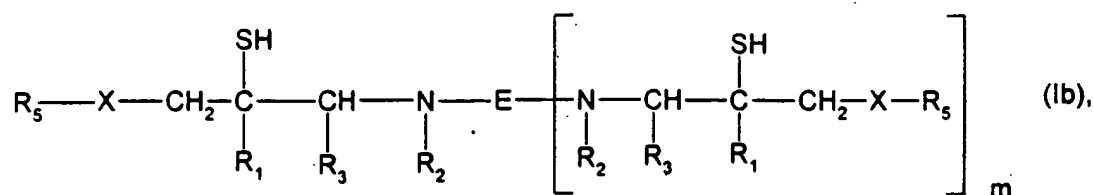
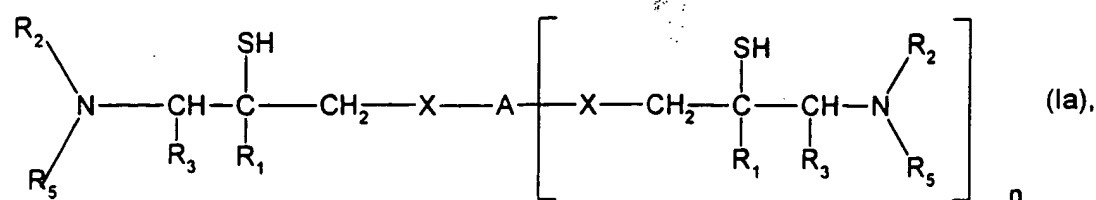


# Patent claims

1. A compound of formula Ia or Ib,



wherein A is an (n + 1)-valent aliphatic, cycloaliphatic, araliphatic or aromatic radical and n is an integer from 0 to 5,

E is an (m + 1)-valent aliphatic, cycloaliphatic, araliphatic or aromatic radical and m is an integer from 0 to 3,

X is -O-, -COO- or -CHR<sub>4</sub>-, with R<sub>4</sub> and R<sub>3</sub> together forming an ethylene group,

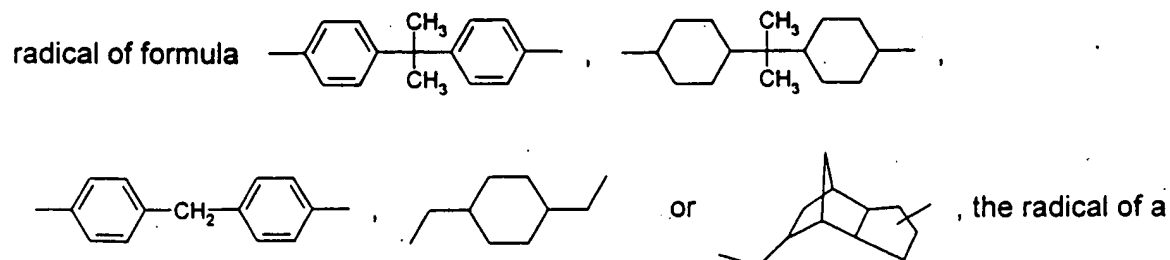
R<sub>1</sub> and R<sub>2</sub> are, each independently of the other, hydrogen or methyl,

R<sub>3</sub> is hydrogen, or R<sub>3</sub> and R<sub>4</sub> together form an ethylene group,

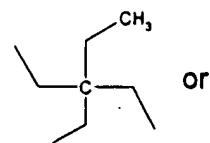
and R<sub>5</sub> is a monovalent aliphatic, cycloaliphatic, araliphatic or aromatic radical.

2. A compound of formula Ia according to claim 1, wherein X is -O- and A is a bivalent radical of a bisphenol or of a cycloaliphatic diol, the radical of a phenol novolak or cresol novolak, the bi- to tetra-valent radical of an isocyanate/polyol adduct or the tri- to hexa-valent radical of a tri- to hexa-functional aliphatic polyol.

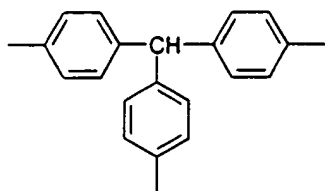
3. A compound of formula Ia according to claim 1, wherein X is -O- and A is a bivalent



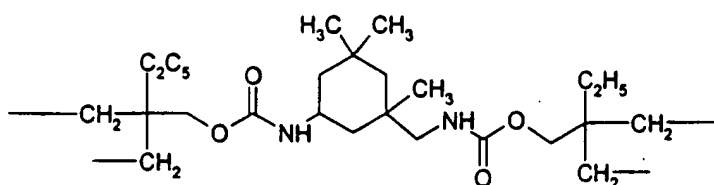
phenol novolak or cresol novolak, a trivalent radical of formula



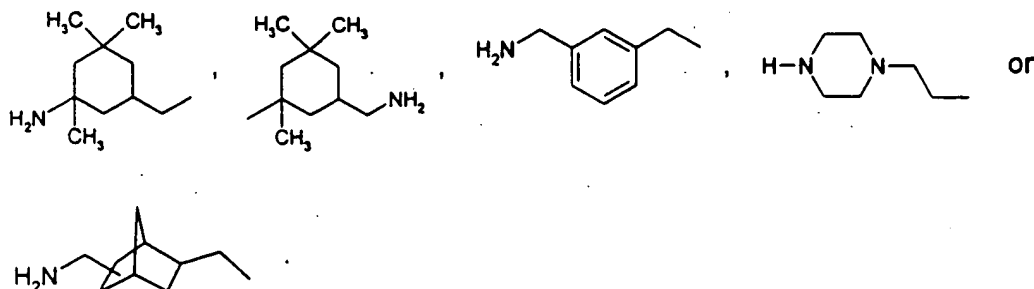
or



or the tetraivalent radical of formula

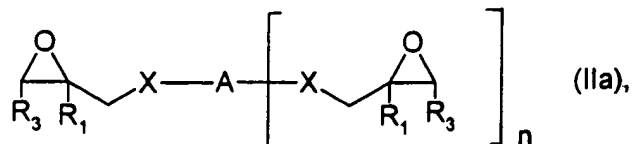


4. A compound of formula Ia or Ib according to claim 1, wherein  $R_5$  is  $C_1$ - $C_{20}$ alkyl,  $C_5$ - $C_{12}$ -cycloalkyl,  $C_6$ - $C_{10}$ aryl or  $C_7$ - $C_{12}$ aralkyl, each of which is unsubstituted or substituted by one or more amino groups, hydroxyl groups,  $C_1$ - $C_8$ alkoxy groups or halogen atoms.
5. A compound of formula Ia or Ib according to claim 1, wherein  $R_5$  is  $C_2$ - $C_{10}$ alkyl,  $C_2$ - $C_{10}$ aminoalkyl, phenyl, benzyl, cyclohexyl or a radical of formula  $H_2N-Z-CH_2-NH-$ , wherein Z is a bivalent cycloaliphatic, araliphatic or aromatic radical or a radical of formula  $-(CH_2CH_2NH)_k-CH_2-$ , wherein k is 2 or 3.
6. A compound of formula Ia or Ib according to claim 1, wherein  $R_1$  is n-butyl, n-octyl, cyclohexyl, benzyl, 2-aminoethyl, 4-(aminomethyl)pentyl, 5-amino-2-methylpentyl, 3-dimethylaminopropyl, 3-methylaminopropyl, 4-aminocyclohexyl or a radical of formula  $-CH_2CH_2NHCH_2CH_2NH_2$ ,



7. A compound of formula Ia or Ib according to claim 1, wherein X is O- and R<sub>1</sub> and R<sub>3</sub> are hydrogen.

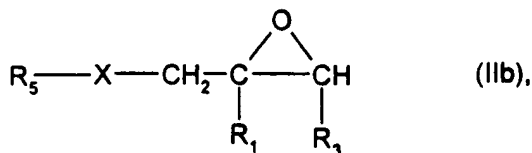
8. A process for the preparation of a compound of formula Ia according to claim 1 by reacting a compound of formula IIa



wherein A, X, R<sub>1</sub>, R<sub>3</sub> and n are as defined in claim 1,

with thiourea or a thiocyanate and subsequently reacting the resulting episulfide with an amine of formula R<sub>5</sub>-NH-R<sub>2</sub> wherein R<sub>5</sub> and R<sub>2</sub> are as defined in claim 1.

9. A process for the preparation of a compound of formula Ib according to claim 1 by reacting a compound of formula IIb



wherein X, R<sub>1</sub>, R<sub>3</sub> and R<sub>5</sub> are as defined in claim 1,

with thiourea or a thiocyanate and subsequently reacting the resulting episulfide with a polyamine of formula E-(NHR<sub>2</sub>)<sub>m+1</sub> wherein E, R<sub>2</sub> and m are as defined in claim 1.

10. A composition comprising

(A) an epoxy resin and

(B) a compound of formula Ia or Ib according to claim 1.

11. A composition according to claim 10 comprising, in addition,

(C) a polyamine.

12. A composition according to either claim 10 or claim 11 comprising component B and, where applicable, component C in such amounts that the sum of the amine and mercaptan equivalents is from 0.5 to 2.0 equivalents, based on one epoxy equivalent.
13. A cross-linked product obtainable by curing a composition according to claim 10.
14. Use of a composition according to claim 10 as coating composition, adhesive, bonding composition for composite materials or casting resin for the manufacture of mouldings.